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EXAMINER

AVERY, JEREMIAH L

ART UNIT	PAPER NUMBER
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2431

NOTIFICATION DATE	DELIVERY MODE
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ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary	Application No. 10/577,928	Applicant(s) HOLZAPFEL ET AL.	
	Examiner JEREMIAH AVERY	Art Unit 2431	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-48 is/are rejected.
- 7) ☒ Claim(s) 39-41 and 47 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

- I. Claims 1-20 were cancelled in a preliminary amendment.
- II. Claims 43-48 have been added.
- III. Claims 21-48 have been examined.

Claim Objections

- 1. Claim 39 is objected to because of the following informalities: lack of indication of amended claim language. The claim language "linking" is not underlined to indicate that it is newly-added claim language corresponding to "linking the content cells in accordance with navigation data". Appropriate correction is required in order to place the claim in compliance with MPEP 714.
- 2. Claims 40 and 47 are objected to due to the claim ending with language "thereby". The Examiner recommends removing "thereby" so that the claim language may read properly and not give the interpretation that additional language is missing.
- 3. Claim 41 is objected to due to double brackets not being used on the omitted comma on the last line of the claim in order to be in compliance with MPEP 714.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 4. Claims 21-38, 41-46 and 48 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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5. The terms "disturbed data access" and "undisturbed access" in claims 21 and 30 are relative terms which render the claims indefinite. The terms "disturbed data access" and "undisturbed access" are not defined by the claims, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Claims 22-29, 31-38 and 41-46 are further rejected by virtue of their dependencies upon claims 21 and 30, respectively.

6. Claim 25 recites the limitation "the data carrier" in line 4 of the claim. There is insufficient antecedent basis for this limitation in the claim. The Examiner recommends amending the claim language to be "the storage medium".

7. Claims 26 and 35 are rejected for containing the claim language of "and/or". The Examiner will broadly interpret the claim language to pertain to "or". Appropriate correction is required.

8. Claims 29 and 37 possess the claim language of "pre-commands *and/or* post-commands...". For purposes of claim interpretation, the Examiner will broadly interpret the claim language to pertain to "or".

9. Claims 44 and 46 possess the claim language "file system structures/file content" and it is unclear as to whether both or only one of the "file system structures" and "file content" are included within the claimed "storage medium". For purposes of claim interpretation, the Examiner will broadly interpret the claims to only require one of said "file system structures" and "file content".

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10. Further, claims 44 and 46 possess the claim language of “and/or” and it is unclear as to whether the claimed “cyclic data” is optional or is in conjunction with the claimed “reproduction obstruction data”. For purposes of claim interpretation, the Examiner will broadly interpret the claim language to pertain to “or”.

11. Claim 48 also possesses the claim language of “and/or” regarding “using file structures and/or file content...” and the Examiner will broadly interpret the claim language to pertain to “or”.

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 21-48 are rejected under 35 U.S.C. 102(e) as being anticipated by United States Patent No. 7,486,790 to Selinfreund et al., hereinafter Selinfreund.

12. Regarding claims 21 and 30, Selinfreund discloses a storage medium having stored thereon data representing at least one stream of content cells and a method to provide copy protection of a storage medium having stored thereon data representing at least one stream of content cells, the content cells being linked in accordance with navigation data, wherein at least one of said navigation data and the at least one stream of content cells is arranged such that accessing the data on the storage medium in a first access mode which does not take consideration of said navigation data provides disturbed data access (column 3, lines 47-51 and 54-58, “Absent these instructions, a light sensitive material will have been activated upon reading the first track and will

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interfere with the reading of adjacent, or nearby, tracks, for a period of time equal to the time of persistence of the light sensitive material”, column 5, lines 26-31, column 9, lines 41-47 and column 14, lines 6-16),

[The claimed “navigation data” is broadly interpreted by the Examiner to pertain to the “tracks” and “sectors” within Selinfreund. Further, the Examiner is broadly interpreting the claimed “disturbed data access” and “undisturbed access” to pertain to the type of access restrictions set forth within Selinfreund (e.g. being able to “read a specific track” and then have access to an “adjacent track” would pertain to the “undisturbed access” and the interference disclosed within Selinfreund would pertain to “disturbed data access” since “the first track” may be read but the “adjacent, or nearby, tracks” will not be read due to the particular “light sensitive material” being utilized to hinder such reading.)]

whereas accessing the data on the storage medium in a second, different, access mode in consideration of said navigation data provides undisturbed access (column 3, lines 51-54, “instructions provided to authorized users of a software program may instruct an installation program to read a specific track and then wait a specified time to access an adjacent track”, column 10, lines 45-52 and column 13, lines 11-18, “read data unaffected by the material 21 from track a”).

13. Regarding claims 22 and 31, Selinfreund discloses wherein the first access mode is a generally linear access mode (column 10, lines 15-20, “read the sectors 20a-20f in that order”).

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14. Regarding claims 23 and 32, Selinfreund discloses further including *at least one* of the following: at least one reproduction obstructing cell physically stored before *or* after a linked content cell (column 5, lines 39-50 and 56-64, column 8, lines 56-67, column 9, lines 1-12 and 41-47 and column 10, lines 15-44).

15. Regarding claims 24 and 33, Selinfreund discloses wherein the *at least one* reproduction obstructing cell is arranged such that a dedicated reproduction device operating in accordance with said second access mode will navigate around said at least one reproduction obstructing cell when linked content cells are accessed, whereas a reproduction device accessing the storage medium in accordance with said first access mode will access linked content cells and said at least one reproduction obstructing cell (column 5, lines 39-50 and 56-64, column 8, lines 56-67, column 9, lines 1-12 and 41-47 and column 10, lines 15-44).

16. Regarding claims 25 and 34, Selinfreund discloses wherein an access of said at least one reproducing obstructing cell prohibits *or* disturbs a further reproduction *or* reduces an entertainment value of reproduced content that is originally stored within the content cells on the storage medium (column 3, lines 10-14, "A data file, for example a movie or audio file, may then be downloaded from a network to the computer in a form that is unplayable in the absence of the code provided by the light sensitive material on the medium", column 13, lines 53-63 and column 14, lines 10-16, "If the disk is copied, for example, by bit-to-bit copying, the light sensitive materials 21 may not be copied, and thus the copied version of the data is uninstallable, unreadable or otherwise unusable").

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17. Regarding claims 26 and 35, Selinfreund discloses wherein said at least one reproduction obstructing cell includes data having an effect that data stored on the storage medium does not conform with the DVD physical specification by *at least one of* the group comprising: infringing rules of EFM+ coding; setting incorrect ECC data for PI and/or PO; setting incorrect EDC, ID, CPR_MAI and/or IED data; addition of illegal UDF file system data; setting of illegal UDF file system data (column 3, lines 60-63, "Areas of light sensitive material may be large enough to defeat sophisticated error correction programs, such as EFM" and column 13, lines 36-45).

18. Regarding claims 27 and 36, Selinfreund discloses wherein said at least one reproduction obstructing cell includes data of *at least one of* the group comprising: data that does not conform to a streaming media standard appropriate to the storage medium; data that generates permutations of reproduced content stored within the content cells; data that adds content unrelated to the content stored within neighboring content cells; data that adds advertising content stored within neighboring content cells (column 5, lines 26-31, "output a string of '0's rather than output actual data positioned on the CD below the material" and column 10, lines 5-14).

19. Regarding claims 28 and 38, Selinfreund discloses wherein said *at least one* reproduction obstructing cell is a stream of linked reproduction obstructing cells that is interleaved with at least one stream of content cells, wherein each of the stream linked cells provides one playback path, and the playback path corresponding to the linked reproduction obstructing cell is not followed by a reproduction device accessing the storage medium in accordance with said second access mode (column 2, lines 19-23,

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“while the material is in one state a data bit ‘1’ may be read, but while the material is in another state a data bit of ‘0’ may be read”, column 5, lines 26-31, column 10, lines 33-44 and column 13, lines 4-20).

20. Regarding claims 29 and 37, Selinfreund discloses wherein said navigation data includes branch commands that are arranged in pre-commands and/or post-commands of program chains that include at least one program or in cell commands within programs, which are defined as a sequence of content cells (column 10, lines 15-20, “read the sectors 20a-20f in that order”, column 12, lines 24-45 and column 13, lines 4-27).

21. Regarding claim 39, Selinfreund teaches a method for producing at least one copy of at least a portion of data stored on a first storage medium, the first storage medium having stored thereon data representing at least one stream of content cells, the method comprising:

linking the content cells in accordance with navigation data, wherein to produce the at least one copy, data representing the at least one stream of cells is accessed in consideration of the navigation data and wherein said accessed data is transferred as a copy to a second storage medium (column 2, lines 64-67, column 3, lines 1 and 2 and column 10, lines 45-65).

22. Regarding claim 40, Selinfreund teaches determining all reproduction obstructing cells physically stored before or after a linked content cell and modifying or removing the cells such that the copy of the storage medium is not obstructed thereby (column 2, lines 64-67, column 3, lines 1 and 2 and column 10, lines 45-65).

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23. Regarding claim 41, Selinfreund discloses a computer program product, comprising program means adapted to perform the method steps as defined in claim 30 when being executed on a computer or a digital signal processor (Figure 1, column 6, lines 38-67 and column 7, lines 1-15).

24. Regarding claim 42, Selinfreund discloses a computer readable storage means, storing thereon a computer program product according to claim 41 (column 4, lines 4-16, column 5, lines 4-31, "CD-ROMs, Audio CDs, MO disks, and DVDs").

25. (New) Regarding claims 43 and 45, Selinfreund discloses further including a physical storage arrangement of *at least one of* the at least one stream of linked content cells that is not in conformity with a linking order of the content cells (column 13, lines 23-31 and 39-45).

26. (New) Regarding claims 44 and 46, Selinfreund discloses further including standard type file system structures/file content and non standard type file system structures/file content used to locate the linked content cells on the storage medium, respectively, wherein said non standard type file system structures/file content routes a read out device to reproduction obstruction data and/or cyclic data (column 7, lines 34-62, column 9, lines 2-12 and 41-47, column 10, lines 53-65, column 12, lines 32-45 and column 13, lines 4-9).

27. (New) Regarding claim 47, Selinfreund teaches further including the step of determining of a linking order of the at least one stream of linked content cells and physically storing the at least one stream of linked content cells such that a reproduction

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of the copy of the first storage medium is not obstructed thereby (column 10, lines 45-65).

28. (New) Regarding claim 48, Selinfreund teaches further including the step of locating a root navigation file only using file system structures and/or file content related to the linked content cells as described in the standard of the first storage medium (column 3, lines 54-60, column 4, lines 14-24 and column 5, lines 26-31).

Conclusion

29. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

30. The following United States Patents and Patent Application Publications are cited to further show the state of the art with respect to secure data storage and access, such as:

United States Patent No. 6,341,196 to Ando et al., which is cited to show an information recording method and information reproducing method for compressed video information.

United States Patent Application No. US 2004/0003270 to Bourne et al., which is cited to show obtaining a signed rights label (SRL) for digital content and obtaining a

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digital license corresponding to the content based on the SRL in a digital rights management system.

United States Patent Application Publication No. US 2004/0187161 to Cao, which is cited to show an auxiliary program association table.

United States Patent No. 6,798,976 to Tsumagari et al., which is cited to show a digital video recording/playback system with entry point processing function.

United States Patent No. 7,079,754 to Kikuchi et al., which is cited to show a digital video system.

31. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEREMIAH AVERY whose telephone number is (571)272-8627. The examiner can normally be reached on Monday thru Friday 8:30am-5pm.

32. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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33. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jeremiah Avery/
Examiner, Art Unit 2431

/Syed Zia/

Primary Examiner, Art Unit 2431